

City of Chattanooga, TN

Personnel Class Specification

Class code 0582

FLSA: Non-Exempt

CLASSIFICATION TITLE: ASSISTANT ENGINEERING DESIGNER

PURPOSE OF CLASSIFICATION

The purpose of this classification is to perform technical engineering tasks to assist in conceptual design, cost-estimating, computer-aided design, detailed design of streets and roads, sanitary sewers, storm water sewers and related structures and Civil Engineering projects.

ESSENTIAL FUNCTIONS

The following duties are normal for this position. The omission of specific statements of the duties does not exclude them from the classification if the work is similar, related, or a logical assignment for this classification. Other duties may be required and assigned.

Performs technical engineering tasks to conceptualize, design, estimate, and oversee various civil engineering projects; utilizes computer-aided design (CAD) software in design work; prepares final design drawings, conceptual designs, preliminary layouts, erosion control plans, and contract documents; conducts final walk-through of projects; develop punch lists; assists with final inspection and acceptance of civil engineering projects.

Ensures compliance with all applicable design criteria, codes, laws, rules, regulations, standards, policies and procedures; initiate any actions necessary to correct deviations.

Performs structural design, roadway design, and hydraulic calculations; coordinates designs with the Engineering Division and consultants.

Performs construction reviews and inspection; investigates project locations and existing sanitary/storm sewer systems; researches new products and materials for use in construction projects; estimates project quantities; calculates and prepares cost estimates; assembles bid documents; leads pre-bid meetings; coordinates construction activities and serves as a liaison for construction projects; assist in providing direction, mediating issues, and resolving construction-related problems; attends construction progress meetings; interpret designs for contractors/inspectors.

Prepares or completes various forms, reports, correspondence, civil engineering design drawings, contract documents, project lists, cost estimates, preliminary layouts, record drawings, engineering work orders, meeting minutes and project schedules.

Operates a computer to enter, retrieve, review or modify data; verifies accuracy of entered data and make corrections.

Communicates with supervisor, employees, other departments, city officials, engineers, designers, inspectors, attorneys, contractors, utility companies, property owners, the public, and other individuals as needed to coordinate work activities; attends various meetings as needed.

Maintains a comprehensive, current knowledge of applicable regulations, standards and guidelines; maintains an awareness of new methods, materials, trends and advances in the profession.

Reads professional literature; maintain professional affiliations; attend seminars, workshops and training sessions as appropriate.

ADDITIONAL FUNCTIONS

Performs other related duties as required.

MINIMUM QUALIFICATIONS

Requires a Bachelor's degree in Civil Engineering or closely related field with two to three years of experience in the design of Civil Engineering projects, utilizing Computer-Aided Design programs or any equivalent combination of education, training, and experience which provides the requisite knowledge, skills, and abilities for this job. Must possess a valid driver's license.

PERFORMANCE APTITUDES

Data Utilization: Requires the ability to evaluate, audit, deduce, and/or assess data using established criteria. Includes exercising discretion in determining actual or probable consequences and in referencing such evaluation to identify and select alternatives.

Human Interaction: Requires the ability to apply principles of persuasion and/or influence over others in coordinating activities of a project, program, or designated area of responsibility.

Equipment, Machinery, Tools, and Materials Utilization: Requires the ability to start, stop, operate and monitor the functioning of equipment, machinery, tools, and/or materials used in performing essential functions.

Verbal Aptitude: Requires the ability to utilize a wide variety of reference, descriptive, and/or advisory data and information.

Mathematical Aptitude: Requires the ability to perform addition, subtraction, multiplication, and division; the ability to calculate decimals and percentages; the ability to utilize principles of fractions; and the ability to interpret graphs.

Functional Reasoning: Requires the ability to apply principles of rational systems; to interpret instructions furnished in written, oral, diagrammatic, or schedule form; and to exercise independent judgment to adopt or modify methods and standards to meet variations in assigned objectives.

Situational Reasoning: Requires the ability to exercise judgment, decisiveness and creativity in situations involving evaluation of information against measurable or verifiable criteria.

ADA COMPLIANCE

Physical Ability: Tasks require the ability to exert light physical effort in sedentary to light work, but which may involve some lifting, carrying, pushing and/or pulling of objects and materials of light weight (5-10 pounds). Tasks may involve extended periods of time at a keyboard or work station.

Sensory Requirements: Some tasks require the ability to perceive and discriminate colors or shades of colors, sounds, depth, texture, and visual cues or signals. Some tasks require the ability to communicate orally.

Environmental Factors: Essential functions are regularly performed without exposure to adverse environmental conditions.

Chattanooga, Tennessee, is an Equal Opportunity Employer. In compliance with the Americans with Disabilities Act, the City will provide reasonable accommodations to qualified individuals with disabilities and encourages both prospective and current employees to discuss potential accommodations with the employer.